

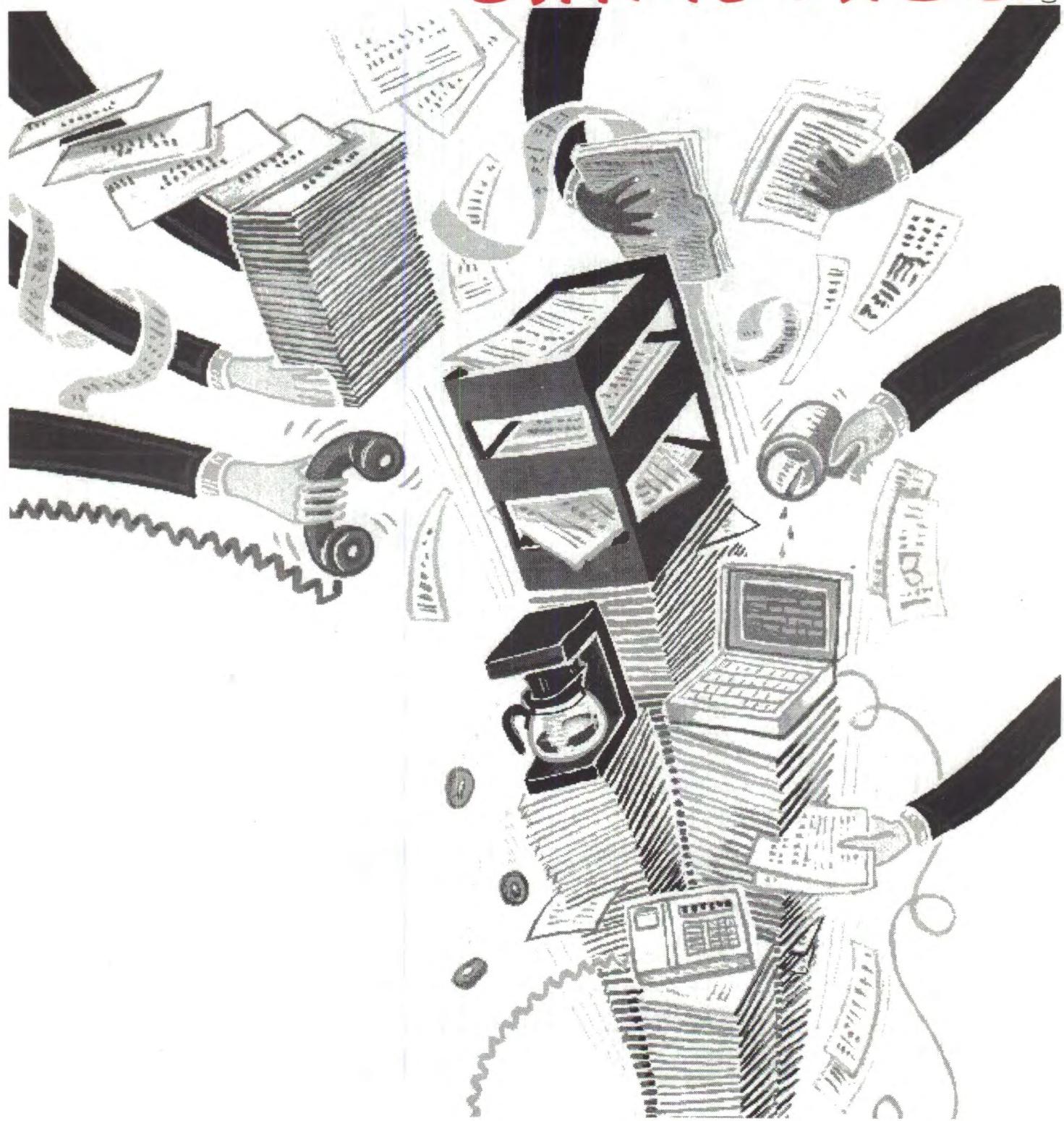
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extended attributes

Phoenix
OS/2
Society

The magazine of the OS/2 community

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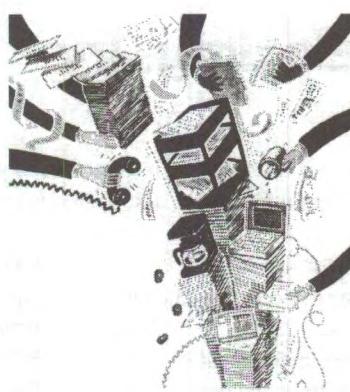
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Here and there

Comment

by Bill Schindler, Editor-in-chief

I have a collection of random announcements and information. So, I'm clearing it all off in one column.

POSSI's birthday party

This August will be the five-year anniversary of the Society's founding. August is when we have our sort-of annual barbecue and party known as the FOOBAR (Friends Of OS/2 Barbeque And Revelry). So, plan on a *really* big party this year!

Warpstock 99

The site and dates for Warpstock 99 have been announced. Warpstock 99 will take place October 16-17, 1999 at the Georgia International Convention Center in Atlanta, Georgia. The official hotel is the Sheraton Gateway which adjoins the Convention Center.

If you'd like to stay up-to-date on what's happening with Warpstock 99, check the Web site at www.warpstock.org. There's also a Warpstock mail list—see the Web site for details on joining the list.

Also, it's a sure thing that POSSI will be attending as a vendor. If you're planning on being at Warpstock 99 and you'd like to help out in POSSI's booth, send an email to our president, Dick Krueger, at president@possi.org.

"Warp Event" 2000

The March general meeting focused on what, where, when, and if the Society should host an event in 2000. Almost everyone seemed to agree that POSSI should host an event, and the spring seems to be the best time.

Discussion of content ranged all over, but the "hot spots" seemed to be LANs and technical content. You can expect to see a survey asking for input on content, dates, and other related items.

The one thing we still don't have for the event is a name.

Meanwhile, the site committee has been getting lots of interest from hotels and resorts. The committee has visited a few of the potential sites, and it looks like there's going to a choice of several excellent locations.

If you're interested in taking part in the planning of this event, you can join the mail list. To join, send an email to steward@bitranch.com. In the body of the message, put: subscribe w2k
end

The address of the list itself is w2k@bitranch.com. ☺

Phoenix OS/2 Society, Inc

The Phoenix OS/2 Society, Inc (POSSI) is an international organization of computer users with an interest in IBM's OS/2 operating system and related issues.

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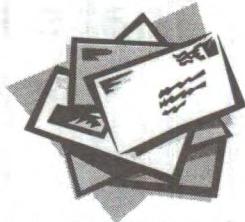
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Letters

Letters to the editor should be sent to editor@possi.org or mailed to the Phoenix OS/2 Society. We reserve the right to edit all letters for content, readability, and length.



In extended attributes, March 99, Pavel Otavsky's article on IBM Works was informative, but it included a statement that was inaccurate. He said "IBM Works has no printed manual." There are two printed manuals for IBM Works. They are *IBM Works Installation and Learning Guide*, part number 93G7202, and *IBM Works Users Guide*, part number 93G703.

Lewis Bethards

Visual Age C++

For your information, there was a product release for Visual Age C++ version 3.6. If you check out the IBM newsgroups you'll see complaints from people who bought it.

There are a couple of important points. Version 3.6 is not actually Visual Age C++, it is just a compiler version. It doesn't include the visual portions (builder and data access). It is cross platform and ships with compatible com-

pilers for OS/2, NT, and AIX. It is priced as a Unix product costing over \$2,000. There is an announcement letter (I've read it) and product number but I don't have the information handy.

I get the impression that version 3.6 was released due to pressure from some very large shops doing cross platform work.

I don't know if you've noticed, but the version 4.0 package includes the version 3.6 compiler and there is information in the help files and maybe even in the startup book showing reasons to choose one over the other.

By the way, I do agree with the intent of your comments, just thought I'd let you know some more of the details.

Darren Croft

Low cost scanning bundle

press release

Solution Technology Inc., developer of TWAIN for OS/2, is now offering a high performance EPSON color scanner and software bundle for OS/2 users. The STi package contains an EPSON SCSI ES-1000C color scanner AND STi's TWAIN enabled Applause Image Utility for OS/2. This bundle allows the OS/2 user to scan black and white, gray scale or 24 bit color images with photographic quality. Applause for OS/2 allows the scans to be prepared for printing, inserting into documents or for use on the Web.

"EPSON is excited about Solution Technology's software support of our scanners and peripherals within the OS/2 environment. We look forward to extending our product offering into the OS/2 community," said Dwight Nichols, VAR Territory Manager of EPSON America.

"We are pleased that we were able to work with EPSON to bring this special scanner bundle to the OS/2 user community. The high quality of EPSON scanners gives the OS/2 user very high flexibility at a very attractive price.", said Leon Zetekoff, Product Manager of Solution Technology.

STi is supplying EPSON ES-1000C scanners from EPSON's "B" stock inventory. EPSON "B" stock scanners

are the result of newer scanners coming to market. These scanners are either new or are EPSON refurbished units. All scanners have undergone complete EPSON quality assurance and come with a one year limited warranty from EPSON America. An Adaptec SCSI card and SCSI cable are included.

This Applause/ES-1000C OS/2 bundle is \$169, plus shipping and sales tax where required. Orders are processed on a first-come, first-served basis. Returns are accepted only for DOA. Deliveries can only be shipped to addresses in North America.

STi (www.stiscan.com) is a major manufacturer of production level OS/2 and NT based image, barcode, and forms processing products including BarCode Anywhere, Genie Forms Express, and Image Edition for OS/2. In addition, the company is a principal supplier of accessory imaging support subsystems for IBM's ImagePlus and VisualInfo product line. ☺

That's no bowling ball, that's my wife!

What I did on my IBM BPEC vacation

by Esther Schindler

A few years ago, if I told you I'd attended the IBM Business Partner Executive Conference (BPEC), you would have automatically assumed that I would return with plenty of OS/2 news. That wasn't the case, this time around, but I made some other observations I'd like to share with you.

First, let me familiarize you with the trade show. BPEC, held in February in New Orleans this year, is meant to spread IBM's vision-du-jour to IBM business partners from around the world. While some of the 4,000 attendees are ISVs and consultants, most of them are resellers, system integrators, and large scale solution providers. The balance is tipped towards AS/400 and RS/6000 dealers, and most seem to be very IS-centric rather than PC or end-user driven. They don't tell the same jokes we do, but they're still very nice people.

It really is a different crowd. At lunch one day, I spoke with two business partners who were adamantly against the U.S. government interfering with Microsoft. (One had stock in Microsoft, and the other markets an application for AS/400 and Windows NT. But presumably they made those choices because they agreed with Microsoft's point of view, before the court case came about. I bit my tongue and reminded myself that I had to listen to other people's thoughts, or I wouldn't learn anything.)

Anyway, the hardware they sell is more expensive than most PC solutions, the software costs upwards of \$100,000, and the budgets are commensurately out of whack—at least from the point of view of OS/2 ISV's shoestring budgets. I'm convinced that more money was spent on printing one of the 4-color glossy throwaway brochures than was spent, in toto, on Warpstock.

New buzzword: e-business

The theme of the conference was "unleashing the power of e-business," which is the sort of phrase that immediately makes me contemplate its opposite. Would leasing e-business require a pooper-scooper?

Depending on how cynical I feel at any given moment, I'm either annoyed or relieved that IBM is off the Java Java Java bandwagon. Even at my most caustic, I'm certain that e-business is a fit for the company. IBM has the corporate credibility to sell serious Internet-business based solutions, they have the connectivity experience to make them work, and the unsexy things that IBM is best at—such as reliability and creating scalable solutions—are just what the Internet needs.

IBM hasn't abandoned Java, by any means. In fact, the good part of this situation is that Java is finally becoming a tool to use when it's appropriate, instead of a one-size-fits-

all answer. Java is (in IBM's eyes, at least) part of an e-business solution, but it's no longer being treated as a technology in search of a problem, much less a silver bullet to shoot at any problem (not to mention to use as the sole ammunition against the Microsoft werewolf).

Where's OS/2?

OS/2 was all but absent at BPEC, but it also wasn't especially relevant. I could easily rant about the lack of an OS/2-equipped workstation in the press room (even after I explicitly asked for one), or that I saw only one presentation slide that mentioned OS/2. It's statistically accurate to point out that just one of the 500 pedestals in the exhibit hall (half of which were IBM's) had anything related to OS/2. (That sole exception showed both Aurora and Work-space On Demand.)

But a rant isn't fair. BPEC isn't a technology show, it's a business show. A significant number of IBM pedestals were demonstrating "Partner Rewards" or "Web Integrator Partner Initiative," not to mention printers or storage hardware. At a guess, I'd say that there were more AS/400 applications displayed than Windows programs. Operating systems weren't the point.

Praise? You're kidding!

That's not to say that IBM filled me with uncontrollable enthusiasm. Several of their business partner messages sounded good on the projectorware, but I saw no indication that they know how to implement the idea. Worse, I have way too much history with IBM to believe any implicit promises that they'll figure it out.

For instance, IBM did a good job conceiving an initiative to encourage Web based businesses (those that cut their teeth by writing HTML and now specialize in site design) to work with IS partners (the traditional mainframe and mini-computer companies, with experience in legacy systems, databases, etc.). However, IBM has no idea how to act like a business yenta, introducing partners to one another like a Jewish mother saying, "You're meant for each other!" (I apologize for the analogy, but the IBMers seemed offended when I offered my first word picture, which involved pimps. Some people have no sense of humor.)

I met with the new guy in charge of the Solution Developer program, and I was impressed despite myself. I'm always happy when the person whom I spend half an hour berating takes careful notes during my criticism, and thanks me for teaching him something. But I wish I had a dollar for every time an IBM executive listened to my suggestions, earnestly and sincerely, and the conversation had no long

term effect at all. My history with IBM makes me cranky and cynical, and that's not the way I'd prefer to be.

IBM has no idea how to work with its business partners; it's always up to the business partner to work with IBM. Plus,

entirely too many IBM initiatives and programs are put together for the convenience of IBM, not to benefit the partner, much less the customer. That's a problem that IBM shares with most of the computer industry,

however, and I'll leave a detailed examination of that issue to another time. ☺

Esther is technology editor at *Smart Reseller*. Some people think that makes her a Microsoft shill. Esther just giggles.

"Supercharged" Layer 1 routing solution

not a press release

RAPID CITY, South Dakota, January 4, 1999—In a moving ceremony early Monday morning, AcmeVaporware, LLFC's CEO John Smallberries unveiled a deal between The Office of Special Investigation (OSI) under Oscar Goldman, and Rex Mundi, U.S. Postmaster in charge of Special Secret Projects. The deal licenses the government's special secret bionic technology to AcmeVaporware for the development of supercharged Bionic Area Networks (BANS) routing in the Physical Layer (Layer 1) for use with the smiling men and women of the U.S. Postal Service.

A few weeks prior to the announcement, several thousand "volunteer" Postal Carriers—injured in "accidents"—were imbued with the bionic technology, under the watchful eyes of Goldman and OSI bionic training manager Steve Austin. All surviving carriers have fully embraced their new lives and look forward to actually working like the guys at other delivery companies. "We have rebuilt them," said Austin. "They are a lot better than they were before; better, stronger, way faster. This just goes to show that some good came out of the Seventies."

"This is the kind of impossible thing we do here at AcmeVaporware. Many said this couldn't be done. We have all their names. We have them right here, in our jackets. But we laugh at them, each and every one. 'HAI' as we say around the cubes!" laughed John Q. Smallberries, chairman and CEO of AcmeVaporware. "Bottom line: this agreement will—overnight—completely eradicate the sloth inherent in the old Postal System and firmly entrench AcmeVaporware as the living embodiment of 'Yesterday's Technology Tomorrow.' And we'll have new t-shirts soon, besides." Smallberries concluded his statements by pointing at people and making gratuitous eye contact.

"Ahhh, technology," said Rex Mundi, U.S. Postmaster in charge of Special Secret Projects, while smoking a huge

cigar. "I looooove technology. It enslaves people while making them feel 'empowered.' This makes me happy."

"We look forward to soundly eradicating what we've termed the 'Bio-Torpometric Object,' or BTO," said Oscar Goldman, OSI Head of R&D and Chief Scientist in charge of Steve Austin. "We're going to take bionic technology and goose the Postal Service something awful, getting rid of every form of torpometric sloth inducement, as well as make a lot of really great slow-motion running sound effects." Goldman later added that letters and packages and magazines and junk mail will soon be routing so damn fast that plain old TCP/IP will simply become obsolete.

"They did what?!" asked Theodore L. Weise, president and chief executive officer of FedEx. "I just don't get it. Those losers couldn't hit water if they fell out of a f—g boat. This whole thing is ridiculous, ludicrous! Ms. Thoatmocker! Get my godd—d attorney!" Weise later added that the agreement with the Postal Service clearly made lots of sense and wondered where he could get one.

About AcmeVaporware

AcmeVaporware, LLFC is a multi-billion dollar offshore holding company, providing comprehensive data transportation, logistics, and torpovapor supply chain management solutions to large, medium, small, very small and very very tiny enterprises, postal carriers and network service providers, as well all goddamned consumers, on a worldwide scale. Information on AcmeVaporware, LLFC, its clandestine technology arm, and its future profligate amounts of purest vapor, are mostly classified. Regardless, it's all on <http://acmievaporware.com> anyway, so whatever.

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Email's power to destroy

by Alan Zeichick

feature

Electronic communication is a dangerous tool. Yes, email is a wonderful thing, as it allows us to communicate with people more quickly and easily than ever before, and often at a very reasonable price. But email is often a really bad way to communicate. If anyone ought to know this, I should—after all, I've been using email since 1978, and a writer ought to be aware of the power of the written word. But even with more than 20 years experience with the medium, and more than 14 years as a professional writer, I still mess up.

Email is harsh. Email is cold. Email is impersonal. Email is dehumanizing. Forget about emoticons like :) or <grin>. Email is an *amplifier*. Neutral words become negative. Negative words become hurtin' words, or fightin' words. Nobody likes to lose a fight, and in cyberspace, nobody has to. So just like political TV ads, once communication goes negative, it stays negative. Generally, it gets nasty.

Have you ever received a nasty voicemail, and played it over and over again, getting more furious all the time? Or received an unpleasant email, gotten angry, then somehow resolved the issue—and then re-read the email and got angry all over again?

That's the power of the written word.

Yet, it's easy to forget how powerful words are, and inadvertently hurt people that you don't want to hurt, and damage relationships that you don't want to damage. A firm policy that I try to adhere to is to never, ever communicate anything negative—or which might be perceived as negative—via any non-real-time medium. That means no negative emails or voicemails.

Here's a recent example: As part of my new consulting practice, I was hired as editor of a little magazine, to help improve its overall quality. An occasional contributor to the magazine, with whom I'd never met or corresponded, sent a long message describing how he'd like to set up a product reviews program—including getting the vendors to help write and edit the reviews, since he thought that the vendors would be inspired to buy an ad. Well, if you know professional magazine publishing, you know that collaborating with a vendor is a definite no-no, and editorial is not written to appease vendors. So, trying to be helpful and educational, I wrote back a very detailed response to this writer, explaining point by point why what he was suggesting was inappropriate, given what we were trying to do with that magazine, and what I really planned to do about reviews.

You can guess what happened; an angry response came back. The guy was angry about many, many things: I wasn't listening, I was discounting his experience, I was being a

prima donna, I was out of touch, I was this, I was that, and hell would freeze over before he'd give the magazine another minute of his time.

My first temptation was to "set ASCII on kill" and respond in kind. But instead, I thought about the fact that the guy had really meant well. So, I waited 24 hours, and gave the guy a call—leading immediately off with an apology for upsetting him, and explaining that he really was valued, and I'd like to involve him in the reviews program. We talked for probably an hour—and we're now friends and colleagues.

Sadly, I've watched exchanges on listservs and online forums—which are even worse than email, because there are witnesses to perceived insults and assaults—where the tone of the conversation gets more and more vitriolic. You know that those individuals would *never* communicate with each other like that in person, or on the phone. But email is harsh, cold, impersonal, and dehumanizing. Take that, Flame-Boy!

The 10% rule

When we talk to each other face-to-face, experts tell us that the words we choose and use only communicate a fraction of the message—in one seminar on interpersonal communication, the instructor said that words comprise only 10% of the message. About 60% is communicated visually, using body language. The other 40% is conveyed audibly but non-verbally, through tone of voice, inflection, timing, and so-on. Sure, the words convey the facts, but the other 90% tells the other party how we mean what we're saying—happily, sadly, angrily, cheerfully, humorously, sarcastically, bitingly, and so-on.

When we communicate in person, we can use our entire communications toolkit of words, body language, and nonverbal messages. We can also immediately tell, by watching the listener's body language, how our message is being received. We instantly adjust our words, body language, or nonverbal messages constantly throughout our conversation.

When we communicate by telephone, we lose the body language, but keep the audible signals, so at least some emotional context is communicated. Unfortunately, we lose our best feedback mechanism: our eyes. Still, we have a rich variety of tools available to us, and we can tell by grunts and silences how we're being interpreted.

When we communicate electronically, we lose everything but the words. Our message loses *all* of its emotional context, unless we insert emoticons. Even worse, we lose the real-time feedback. We have no idea how our message

will be interpreted. And if it is misinterpreted (and a negative message is always interpreted more harshly than we intend), we can't take it back; that email sits in the recipient's mailbox, or better still, is forwarded around to other people.

Have you noticed how many times we say "Sorry" when talking in person, and how rarely we apologize when using email? How much more willing we are to compromise when talking on the phone, but how important it is to "win" during a flame war?

I'll close this piece by urging all of you to think of email as a "positive message"

medium. If you've got something good to say, post it on a listserv or send an email. If you've got something unhappy to say, pick up the phone, or walk down the hall. Your words have power, but without the emotional context of real-time non-verbal messages and body language, it's quite possibly the power to destroy. ☺

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The saga of a partial computer upgrade.

by Julian Thomas

feature

My wife, Mary Jane, has my castoff 486 machine. It's really not too shabby with an AMI motherboard with 32 MB, running Warp 4 FP8. I have it networked to my main machine, and with InJoy and IP masquerading she has full Internet access for mail (she has her own email address on my ISP account) and the Web. She uses the machine for WordPerfect 6.0 DOS (under OS/2).

Even so, Mary Jane has been complaining that there are programs that she wants to run but require Windows 95; finally I decided to let her learn firsthand how things are on the dark side. To do this I would set up a boot manager partition and a Windows 95 partition, with existing FAT partitions made huge for Windows 95 apps and data and shared data.

The hard disks (IDE, on a single onboard controller) in her machine were 540 (C, E both HPFS) and 345 (D hpfS; F fat) MB. Clearly a new drive was called for, so we sprung for a 6.4 GB Quantum. Installed it, updated my emergency OS/2 boot diskettes with IDEDASD (for large hard disks), and fired up Partition Magic 3 from diskette.

First glitch—the old AMI BIOS on the motherboard never heard of LBA, so as far as FAT was concerned, only the first 500 MB of the new drive was usable. So I partitioned it temporarily, copied C and E onto it, then put the 345 MB on as the secondary drive (preserving the D and F partitions).

I started looking for solutions. A copy of Ontrack came with the drive, but I was scared off by bad reports and also a potential requirement to reinstall OS/2—not something I wanted to do. I checked with AMI to see if there was a BIOS upgrade for the board, no dice. I also investigated doing a motherboard replacement, getting a new controller and incidentally a faster CPU. But the best options were ATX and the case and power were AT. AMI has an ISA IDE BIOS card that overrides the system BIOS and provides LBA, but at \$50 it seemed expensive. Looking further, I found that DTC has a similar card for around \$17, and also a controller with the same capability (to override the system BIOS for the onboard IDE as well as manage its own IDE string). Since the BIOS card was backordered, I ordered the controller (also \$17).

When it came, I plugged it in (or thought I did) but nothing worked—the new controller BIOS screen didn't come up, and the drive on the new controller wasn't there. A lot of replugging the card (tried several sockets), cable swapping and fiddling with base machine bios setup, nothing seemed to help. Tried the controller card in another system and its bios screen showed up as promised, so the card was presumably okay. Finally found the problem—the con-

troller card didn't fit into the ISA socket on the board (although it did fit in the other system). One of the tabs was just a bit too wide. I took it down to the shop for a quick "counselling session" with a hand grinder, and it then plugged in and seated correctly. At last! The BIOS screen came up, and the new BIOS correctly detected both drives (the new one on the old controller, one of the old ones on the new controller). I wanted the new one to be the primary for boot manager and two C partitions; for some reason, disabling the old controller and putting both drives on the new one did not work.

From there on, it was easier. I fired up OS2 from diskettes again. FDISK saw both drives, but I bailed out and brought up Partition Magic again to partition as follows:

Boot manager—choice between:

C HPFS (Warp) 800 MB

C' FAT (Windows 95) 600 MB

Extended partition

E—HPFS (warp data) 2 GB

F—FAT (shared data, Windows 95 apps) 1.8 GB

G FAT (ditto) .9 GB

The reason for both F and G is the 2 GB size limit for FAT. The D partition is on the larger of the old drives which was repartitioned into a single HPFS partition.

The partitioning went well, albeit slowly (PM is slow for formatting 6 GB of disk). Then with a bit of recabling, I copied all the partitions from the old drives either to their final resting place or to a holding directory on the new drive. I finally hooked the 540 MB drive up as secondary, used PM to delete its two partitions and to create a single HPFS partition (D) and copied the old D drive contents from the holding directory to the newly formatted drive.

In the process of recabling for copying from one disk to another, the drive letters keep shifting around; I reduced the risk of error by picking labels that included the intended final disk letter.

At this point, the observant reader will note that the FAT partitions are F and G in Warp, but show up as D and E in Windows 95. Ordinarily it would make sense to put the FAT partitions before the HPFS data/apps partitions, so that they have the same drive letters in both environments. However, for many years D has been my primary HPFS data and apps partition, and I wasn't up to the hassle of rooting out all the instances of D:\os2progs or D:\{anything else} throughout the system without breaking something.

At this stage of the game, the system is as fully operational in OS/2 as it was before, but with a lot more disk space, and I've installed Windows 95 along with Netscape 4.51 and Internet Explorer. The network card (which has

worked all along in OS/2) wouldn't work in Windows 95 until I contacted Artisoft tech support (the card is an older coax-only Noderunner) who told me to call it a Novell/Anthem compatible. Now it is able to access the Internet using TCP/IP (which I was careful to install in Windows 95 networking) to my machine and then through InJoy. Unfortunately, there doesn't seem to

be any Windows 95 equivalent to the "HOSTS" file, so that ftp from that machine to one of the other machines on the local LAN requires the use of dotted decimal IP addresses.

Fortunately, the only plug and play card in the system is the sound card, and it seems to be happy in both OS/2 and Windows 95. Once I find and install a Windows

95 reexec (which I use to initiate InJoy on my machine to connect to the Internet) and a mail program on the machine, we can leave it in Windows 95 for an extended period—hopefully just long enough for MJ to realize how good she really has it with OS/2! ☺

Computer language breakthrough

by John R. Andrews, University of Illinois at Chicago

Bell Laboratories has formally announced what it believes is the ultimate computer science language. Described by Iusi Nogoto, the foremost Japanese fourth generation language expert, as "the only truly elegant computer language ever devised," NULL, as it is known, was developed by the same department that originally invented the wrong number, the busy signal, and the phrase, "The number you have reached is not in service."

NULL is the culmination of five years work by a team of language designers and computer science mathematicians. The final breakthrough occurred when operating system expert Hugh Nicks suggested that if removing GOTOS was good then why not scrap IF statements as well, since they usually required typing too many characters anyway. This brilliant concept was extended through a series of complex mathematical theorems that form the basis of the NULL language. Put in layman's terms by Sally Kahn-Vallee, electrical engineer and PROM reader, "Like first we tossed out the bath water, then the baby, and like finally the whole tub." The elegance and conciseness of NULL can thus be proven to be a direct consequence of the fact that the language as defined contains no statements at all. While at first glance this may seem a drawback, in fact, it is a major improvement over any other language. A few of the reasons are:

- Highly structured constructs.
- Advanced data hiding techniques.
- A NULL compiler can be written first in NULL without ever needing to be written in a lower level language.
- Since there are no statements to compile, in fact, no compiler need ever be written in the first place, saving time and money.
- Since there will be no compilers, no new releases will

ever be issued hence maintenance is reduced.

- NULL programs are highly portable and totally machine independent.
- NULL programs compile and execute rapidly. An important point to note is that with the addition of a small amount of language dependent code, e.g. PROC/END etc., all NULL programs can be compiled by any other language compiler.
- Since there will never be new releases of NULL, all programs are upwardly and downwardly compatible.
- NULL can be parsed top-down, bottom-up, left-right, right-left, inside-out, and over-easy.
- NULL programs are both self-documenting for clarity and self-concealing for security.
- NULL programmers are easy to find and once found can be fired since they are not needed.
- If desired, specialized NULL hardware could be designed, implementing the code in firmware. Of course, such hardware may require years of development. One suggestion from Bell's VLSI experts Nora and Andy Gates was to take an existing available chip and remove all the instructions except NOOP. While this should work in theory, they acknowledged that it is probably not the most efficient implementation.

These are just a few of the many ways NULL is superior to all current computer languages. You can, no doubt, think of more. For further reading consult any of the numerous books and articles by Donald Knuth, David Parnas, and of course, the basis of all modern computer language theory, "The Emperor's New Clothes." ☺

WARNING, CAUTION, DANGER, AND BEWARE!

Gullibility Virus spreading over the Internet!

Important!

WASHINGTON, D.C.—The Institute for the Investigation of Irregular Internet Phenomena announced today that many Internet users are becoming infected by a new virus that causes them to believe without question every groundless story, legend, and dire warning that shows up in their inbox or on their browser. The Gullibility Virus, as it is called, apparently makes people believe and forward copies of silly hoaxes relating to cookie recipes, email viruses, taxes on modems, and get-rich-quick schemes.

"These are not just readers of tabloids or people who buy lottery tickets based on fortune cookie numbers," a spokesman said. "Most are otherwise normal people, who would laugh at the same stories if told to them by a stranger on a street corner." However, once these same people become infected with the Gullibility Virus, they believe anything they read on the Internet.

"My immunity to tall tales and bizarre claims is all gone," reported one weeping victim. "I believe every warning message and sick child story my friends forward to me, even though most of the messages are anonymous."

Another victim, now in remission, added, "When I first heard about Good Times, I just accepted it without question. After all, there were dozens of other recipients on the mail header, so I thought the virus must be true." It was a long time, the victim said, before she could stand up at a Hoaxees Anonymous meeting and state, "My name is Jane, and I've been hoaxed." Especially since her name was Linda. Now, however, she is spreading the word. "Challenge and check whatever you read," she says.

Internet users are urged to examine themselves for symptoms of the virus, which include the following:

- The willingness to believe improbable stories.
- The urge to forward copies of such stories to others.
- A lack of desire to take three minutes to check to see if a story is true.

T. C. is an example of someone recently infected. He told one reporter, "I read on the Net that the major ingredient in almost all shampoos makes your hair fall out, so I've stopped using shampoo." When told about the Gullibility Virus, T. C. said he would stop reading email, so that he would not become infected.

Anyone with symptoms like these is urged to seek help immediately. Experts recommend that at the first feelings of gullibility, Internet users rush to their favorite search engine and look up the item tempting them to thoughtless credence. Most hoaxes, legends, and tall tales have been widely discussed and exposed by the Internet community.

Courses in critical thinking are also widely available. Online help is provided by many sources, including:

- Department of Energy Computer Incident Advisory Capability at <http://ciac.llnl.gov/ciac/CIACHoaxes.html>
- Symantec Anti Virus Research Center at www.symantec.com/avcenter/index.html
- McAfee Associates Virus Hoax List at www.mcafee.com/support/hoax.html
- Dr. Solomons Hoax Page at www.drsolomons.com/vircen/hoax.html
- The Urban Legends Web Site, www.urbanlegends.com
- Urban Legends Reference Pages at www.snopes.com
- Datafellows Hoax Warnings, www.Europe.Datafellows.com/news/hoax.htm

Those people who are still symptom free can help inoculate themselves against the Gullibility Virus by reading some good material on evaluating sources, such as:

- Evaluating Internet Research Sources at www.sccu.edu/faculty/R_Harris/eval8it.htm
- Evaluation of Information Sources, www.vuw.ac.nz/~agsmith/evaln/evaln.htm
- Bibliography on Evaluating Internet Resources at <http://refserver.lib.vt.edu/libinst/critTHINK.HTM>

It is possible to design responsible alerts for people to circulate on the Internet. A how-to that draws positive conclusions from long experience with the evils of badly designed alerts, Designing Effective Action Alerts for the Internet, can be found at <http://weber.ucsd.edu/~pagre/alerts.html>.

Lastly, as a public service, Internet users can help stamp out the Gullibility Virus by sending copies of this message to anyone who forwards them a hoax:

This message is so important, we're sending it anonymously! Forward it to all your friends right away! Don't think about it! This is not a chain letter! This story is true! Don't check it out! This story is so timely, there is no date on it! This story is so important, we're using lots of exclamation points! Lots!! For every message you forward to some unsuspecting person, the Home for the Hopelessly Gullible will donate ten cents to itself. (If you wonder how the Home will know you are forwarding these messages all over creation, you're obviously thinking too much.)

Act now! Don't delay! Limited time only! As seen on TV! Not sold in any store! ☺

Speed to our next meeting

general meeting

by Esther Schindler

Close to 100% of Phoenix OS/2 Society members are online. In addition to being technically sophisticated, we're also very connected. But, to extend the old saying, you can't be too thin, too rich, or have too fast an Internet connection.

Unfortunately, for a lot of businesses and home users, incredibly fast Internet speeds have been far out of the budget. That might change for you, really soon—especially if you attend the next general meeting, on Tuesday, April 9, when SpeedChoice will demonstrate its affordable, high-speed Internet service. And yes, it works with OS/2.

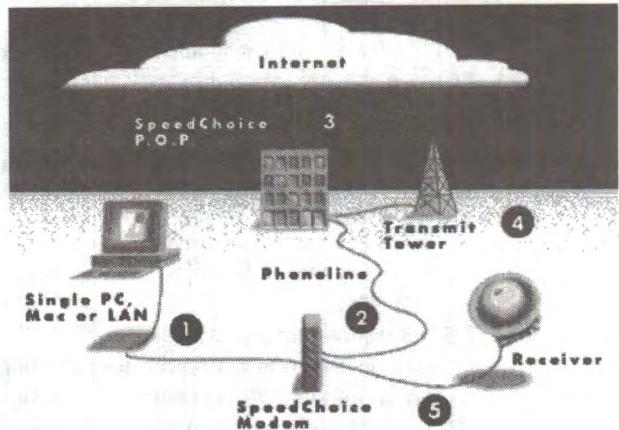
Did you say wireless?

SpeedChoice is a wireless, data communications service company and an ISP that specializes in high-speed connections to the Internet. It offers businesses—of any size—a full range of products and services that can help you operate faster and more efficiently. SpeedChoice lets home users experience the Internet how it was meant to be... fast! Enjoy download speeds up to 100 times faster than your old modem could ever handle.

That is real speed. Speed for everything you do online—email, chat, FTP, and surfing the web. Speed for everything you could never do online before, like video and audio, large document transfer, and no waiting!

SpeedChoice accomplishes these incredible speeds through a wireless connection. Your Mac, PC, or LAN receives information through a fixed wireless 10 Megabit per second downstream data channel. The return upstream path can range from a dial-up telephone circuit or ISDN line, all the way up to a dedicated or frame relay circuit. (Realistically, you still do need a phone line. Dual-direction wireless access is coming, but it's not imminent.)

This means realistic download speeds of 1 to 2 Mbps at home and 5 to 6 Mbps for your busy corporate LAN and its stressed T1 line. The technology is called MMDS, Multi-channel Multi-point Distribution Service, and it transmits 2.5GHz signals through the air, enabling superior signal transmission at higher speeds than other wireless technologies. Since no satellite transmission is involved, typical



problems of latency and speed restrictions do not apply. The SpeedChoice fixed, wireless network is a highly reliable, secure medium for data transmission.

All this starts at \$39.95 for a home user. It's available in Phoenix and Detroit right now, though the company is expanding. (Sensibly, they're testing in comparatively smaller markets. If it's not available near you, perhaps you should consider moving to Arizona, which we think is a good idea anyway. Until then, you can check out the company at www.speedchoice.com.)

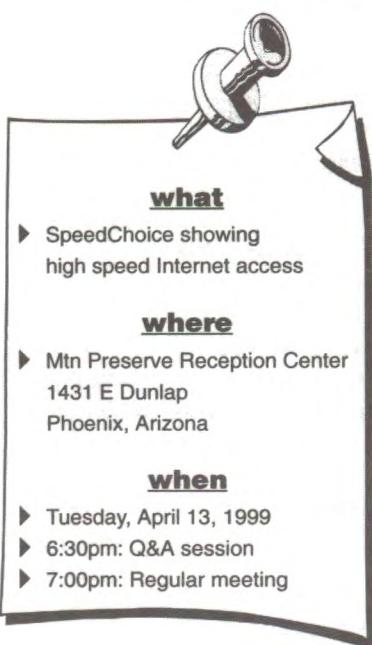
And you said OS/2?

SpeedChoice doesn't formally support OS/2, because they don't have any techies who swear to know it as well as, well, the average member of the Society. But, just like any other ISP, they use TCP/IP and dialup settings. (And, after all, I was able to talk them into showing up. That's a good sign. A better sign would be for you to show up, to make it clear that the OS/2 community is interested in technology like this.)

You'll probably have an easier time at installation if you have a Windows or Macintosh machine handy for the setup guys, but one Society board member has been regaling the rest of us with his download speeds. At the meeting, we'll describe some OS/2 specific tips and tricks to make the system work across your LAN.

When and where

The general meeting will be held on Tuesday, April 13, at 7:00pm, at the Mountain Preserve Reception Center, 1431 E Dunlap. The "random access" Q&A session starts promptly, on the dot, at 6:30pm, give or take a half hour. Visitors are always welcome, especially if they bring chocolate. This meeting is very non-OS-specific, so it might be a good time to bring along a friend that uses another operating system. ☺



- ▶ SpeedChoice showing high speed Internet access

where

- ▶ Mtn Preserve Reception Center
1431 E Dunlap
Phoenix, Arizona

when

- ▶ Tuesday, April 13, 1999
- ▶ 6:30pm: Q&A session
- ▶ 7:00pm: Regular meeting

Coming events

History

A list of events scheduled by the Phoenix OS/2 Society and other OS/2 user groups.

April 1999

5 Magazine submission deadline for May issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.

6 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

13 General meeting; Speed Choice, showing high speed Internet access. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

24 Board meeting and magazine prep. Meeting is 10:00am to 1:00pm. Eat a brunch, learn about the inner workings of the Society, and help get *extended attributes* ready to mail. Location: Bill and Esther Schindler's house in north Scottsdale, 9355 E Mark Lane. Call 602-585-5852 or send email to esther@bitranch.com for directions.

May 1999

4 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs.

Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

5 Magazine submission deadline for June issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.

11 General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

22 Board meeting and magazine prep.

June 1999

1 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs.

Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

5 Magazine submission deadline for July issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.

April						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

May						
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16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

June						
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5						
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

8 General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

26 Board meeting and magazine prep.

July 1999

6 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm.

Coordinator Mike Briggs.

Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

5 Magazine submission deadline for August issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.

13 General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

24 Board meeting and magazine prep.

July

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

August 1999

3 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm.

Coordinator Mike Briggs.

Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

5 Magazine submission deadline for September issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.

10 General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

28 Board meeting and magazine prep.

August

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Meeting locations

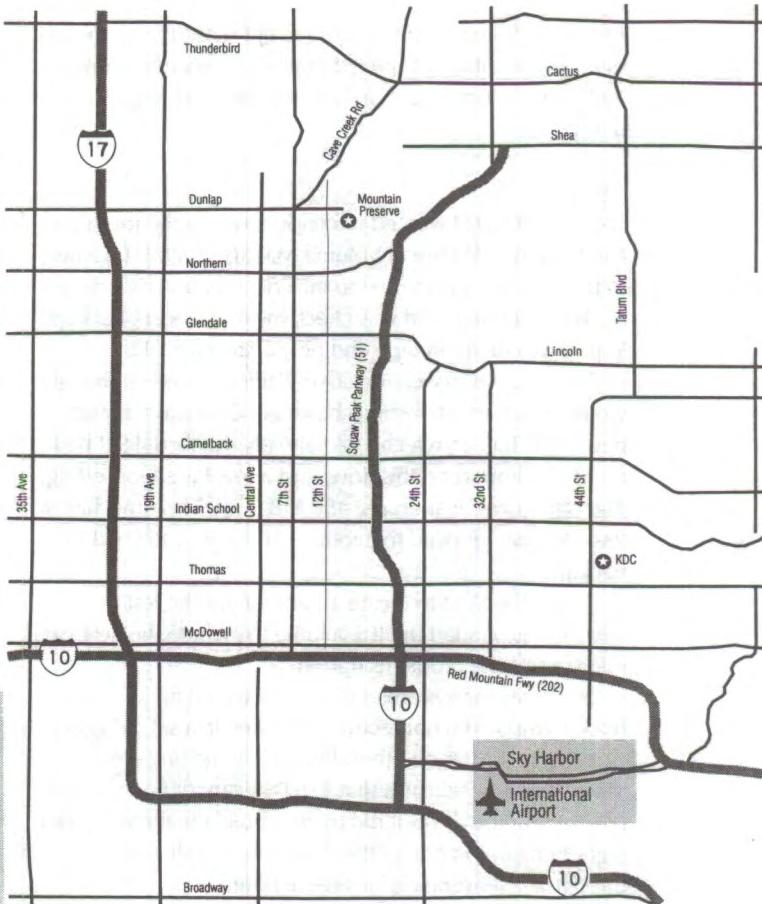
Directions to meeting locations.

General meetings are held at the Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

From the Black Canyon, exit at Dunlap and head east. From the Squaw Peak, exit at Northern. Go west to 12th Street, turn right, go north to Dunlap, turn right, and it's two blocks up on the right.

The "How OS/2 Works General Interest Group" and the Internet SIG (net.sig) meet at Knowledge Development Center, 2999 N 44th St, Suite 400. That's just north of Thomas, in the building with the green dome. Plenty of free parking is available in the garage behind the building. ☺

If the mailing label on the back cover says "sample" then this may be the only copy of extended attributes that you will ever receive. If you want to keep getting the magazine (and receive all the other benefits of membership), you must join! A 12 month membership in the USA is only \$30. (See the form for membership pricing in other areas.) Tear out the application, fill it in, and mail it with your membership fee today!



Making a character table in EPM

by Bill Schindler

Type in the following code and save it as chars.erx. Run it from inside of EPM (Enhanced Editor) using the command RX CHARS. When it finishes running, you'll have a character table that you can use to cut-and-paste characters into other files.

```
/* Chars.erx
 * Generate a table of characters
 */
/* Create the headings */
str = ''
DO i = 0 TO 15
  str = str || ' ' || D2X(i)
END
/* Insert the headings */
CALL EtkInsertText str
```

```
/* Create the table */
str = '0'
DO i = 0 TO X2D('FF')
  /* Add a character */
  str = str || ' ' || D2C(i)
  /* When the line is long enough ... */
  IF Length(str) >= 32 THEN
    DO
      /* ... insert the line ... */
      CALL EtkInsertText str
      /* ... and start a new line */
      v = Word(str, 1)
      v = D2X(X2D(v) + 1)
      str = v
    END
  END
RETURN 0
```

The bleeding edge

two warped

by David P. Both

After installing Aurora (reported in last month's column), I did some additional testing that proved very interesting—and took me once again to the very bleeding edge of computing.

JFS

One of the tests I wanted to conduct was of the Journaled File System (JFS) Logical Volume Manager (LVM). I wanted to try expanding a volume to include a second disk drive.

The first thing I did was check my most recent backup. Yup, it was there on tape and only a few days old.

The two drives were decidedly different and I thought would make an interesting challenge. One was a brand new 6 GB IDE on which I had already installed JFS. I had no files of import on this drive, just a few I used for testing. The other drive was an old 450 MB SCSI. This drive had a few files that I moved to another drive. Plus I still had my backup.

I used the LVM to create a partition on the test drive and then expanded the JFS volume to include the new partition... and the problems started.

Suddenly the system crashed and would no longer boot. CHKDSK did not recover all of the drives. I did get the C: drive back, but on other drives I kept getting error SYS0551 which indicates that CHKDSK cannot find the root directory of the drive. It did try to rebuild the directory, but it got hung up on one of the drives about half way through—after running for several hours.

Graham Utilities

I have been wanting to say some good things about Chris Graham's great set of utilities for a long time, now, but really wanted to wait until they had saved my bacon. Well, they have!

I was able to use the HPFSSStat utility to set the affected partition as Clean. This utility can be used to reset the Partition Dirty flag that is always set whenever files are open. CHKDSK normally resets this flag when it has finished recovery of the drive, but since it could not finish, the flag would not reset. As a result, every time I rebooted the system, CHKDSK attempted to run.

Resetting the Dirty flag to show the drive as "Clean" allowed me to boot the system and inspect the damage. It was not what I expected. Thinking the drive-spanning volume was the problem, I deleted the JFS partitions to get rid of the link between the two drives. I discovered that both of those drives were ok. I reformatted both of them as JFS but left them as separate volumes as I continued my sleuthing.

I ultimately discovered that the problem was that one of my older 1 GB SCSI drives had gone south. No matter what I tried I could not persuade any of my systems to even acknowledge its presence. The SCSI BIOS would not even detect it.

The reason that CHKDSK was not completing was that unlike in prior versions of CHKDSK, large drives (that is those drives larger than 8 GB may be autochecked by the new 32 bit CHKDSK if sufficient memory is available. The amount of memory required can vary between 16 MB and 48 MB depending on the size of the drive. To enable the autochecking of large drives, the following line must be added to your CONFIG.SYS:

BASEDEV=CHKDSK.SYS

From now on I will certainly remember to add this line to my CONFIG.SYS file as soon as the initial installation is complete. Unfortunately, it is not added by default.

What is really embarrassing is not only do I know this, but that this is in my own "DataBook for OS/2 Warp."

To ensure that no real lingering problems existed on my drives, I ran Graham Utilities Disk Test (DT) in both file and logical modes. This utility did not find any problems on any of my drives.

Although the disk utilities do not yet understand JFS partitions, Chris Graham says that he is working on adding that capability. The Graham Utilities that do not pertain to disk drives run fine regardless of the file system.

Conclusions

The base operating system and network code have been around for years and are both rock solid. The JFS code is taken from IBM's AIX platform and except for a few porting bugs is also very reliable.

The only administrative complication is the need to create access control profiles at the NT server rather than from the Warp Server Administration Interface. With Warp Servers, the aliases and can be created from any workstation with the administrator's interface installed. IBM says that this will be corrected in future versions of the product; they apparently did not have enough time or development money needed to add this function to the first release of Warp Server for e-business.

The only other concern is that OS/2 only supports the flat, single domain structure. It would be nice if OS/2 supported trust relationships and hierarchical domain structures as Windows NT does. Lack of this support means that it would be difficult to implement an integrated NT—OS/2 environment on the hierarchically organized domains of many NT based networks.

Warp Server for e-business does an excellent job of integrating OS/2 and NT resources in a domain. In a single domain, or in an environment with multiple flat domains, Aurora can integrate NT and Warp in a way that is seamless to the end user with only marginally extra effort than it takes to maintain a Warp only or NT only domain. In fact, Aurora makes it easier to

administer an NT domain through its extension of aliases to that environment.

IBM called OS/2 2.0 "The Integrating Platform" for its ability to run OS/2, DOS, and Windows programs all at the same time. Aurora should be the network integrating platform for the new millennium. ☀



OS/2 Fixpaks on CD-ROM

Stop downloading multi-megabyte Fixpak files and get the latest Warp Fixpaks on CD-ROM for only \$15. Subsequent CDs cost you only \$8! Pop in the CD, and run the installation program to install the Fixpak.

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The JP Software CD Suite for only \$71.99 - includes 4OS2, 4DOS, 4NT, and versions of Take Command for OS/2, Windows 3.1, and Windows NT.

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800-414-4268 / 910-350-2937 FAX

OpenDoc wrap-up

Drawing conclusions from OpenDoc experimentation

by Marilyn Pizzo

I've spent the last few months exploring OpenDoc features, but just how easy is OpenDoc to use? I found it wasn't quite as easy as I had anticipated. I wouldn't say it was difficult either. Awkward may be a more accurate word.

I dragged a Text Part component to my desktop and opened it. Thinking I would be clever, I decided to import a file instead of typing something. Much to my surprise, instead of text appearing on the screen, there was a list of numbers. Then I remembered the file was not in ASCII text format.

I proceeded to type a couple of basic sentences. It is very easy to change the font, text color, and back color. I investigated the other options—alignment, indentation and spacing. All functioned as you would, as in more conventional word processing software packages. I made sure to save my creation using the "Save as" option so I could use it later.

Moving on to something hopefully more fun, I dragged a 2D Graphics component to my desktop and opened it. I used my new found artistic ability to create interesting shapes. It takes a little practice to get the shape located where you want it to be. The Arc seemed to be a little more challenging than the other shapes, but the instructions at the bottom of the window were very helpful. As I experimented, I accidentally put one design partially on top of another I had already created. I made use of the undo function so I could try again. My aim wasn't much better the second time around so I tried a different approach. In most software packages involving graphics, you can alter the size of a selected graphic. I selected one design and tried to move it—you know, the old hold down the button and drag it approach. That didn't work, so I tried making it larger. When you select the design, it is surrounded by the distinctive little squares in the corners and at each side. However, you cannot adjust the design as you may have grown accustomed from other software. Now I knew that I must be really careful where I locate things, because (short of undoing constantly) they aren't moveable or correctable. I tried changing the line color and filling my creations with different colors. These functions worked as you would expect. I also tried the rotate function. There are on screen prompts at the bottom of the window to instruct you and tell you to what degree you have rotated your selected design.

After I was somewhat proficient in working with both the Text Part and the 2D Graphics Part, I decided I was ready for the Page Layout component. But was it ready for me? I used the Page Layout component as my Root component. I dragged a copy of the Text Part component that I

saved earlier into the Page Layout component. I was happy when I released the mouse button and the text I had typed was there. Now I wanted to test whether it was really true that the text would wrap around a 2D Graphics Part component embedded in the Text Part component. One of the 2D Graphics Part components I saved was a square. I dragged a copy to the Text Part component I had just embedded in the Page Layout component. When I released the mouse button, the text did move to accommodate the graphics. I thought it was a little strange that the outline of the square didn't show but I didn't worry about it. I then dragged two more copies of the same 2D Graphics Part component to the same text. It was interesting how the text split and wrapped around each graphics component. I went one step further. I selected the first 2D Graphics Part component embedded and used the tools to create a design. I did this in each 2D Graphics Part component embedded. It was fun and everything worked as predicted. I even printed it out.

Once I got used to the different tools and options, I decided that OpenDoc wasn't too hard to use at all. Through the research and reading the documentation I printed out, I still am puzzled about two things. First, why OpenDoc is so far hidden within OS/2. Second, what the real purpose is for OpenDoc.

Everyone should at least investigate what OpenDoc is all about. Formulate your own opinion. ☺

A different OS/2 certification?

Changing industry standards for technical certification

press release

No Wonder, Inc. announced the launch of its new "Real-World Certification" program, aimed at filling the "huge gaps" in the industry left by current accreditation programs. The new certification is an interactive evaluation process, providing technical professionals and employers with a new resource for measuring levels of expertise and for supplying the qualifications needed in today's technical market, including the all but unheard of certification for the Macintosh platform.

"Anyone can take a class, or cram late night to pass a test, but this doesn't demonstrate an ability to answer real life problems," says Scott William, No Wonder's founder. "We are offering what MSCE, CNE and others aren't: credit for 'real-world experience.' These problems don't come out of a book, this certification actually means something."

Applicants will be evaluated over the course of three months, during which time they will be responding to the questions submitted to No Wonder's personal support forum via the web. Certifications will be awarded to those who show proficiency in all areas of this process, which include: technical knowledge, problem solving, researching and follow-up skills, and personal communication ability. Certifications are offered in the areas of Internet/Web applications, Macintosh, Windows, and Linux operating systems.

The addition of this new service for support personnel is a continuation of No Wonder's personal approach to tech services. "We are doing our best to provide a light at the end of the tunnel for tech support services. These certifications are meant to cut through the tech-speak and classroom scenarios and put the applicants through the real life obstacle course of the computer industry," says William.

The certification program is open to all applicants. A \$35 non-refundable processing fee is required and no guarantee is offered regarding the awarding of certificates. Interested technicians may visit

the No Wonder! web site for more information and to sign up for the program.

No Wonder!, www.nowonder.com, has been providing online users with fast, accurate, free answers to their computer questions since 1996. The company supports all aspects of the electronic industry, covering Macintosh, Windows, UNIX, OS/2, and BeOS platforms as well as the online environment including HTML, Java, and other web based features. No Wonder is 100% volunteer staffed with over 500 volunteers worldwide. In 1998 the team at No Wonder! responded to over 50,000 user questions. The company's unique, personal approach to computer troubles has made No Wonder! an Internet leader for free tech support. ☺

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Phantom variables

Exploring programming malpractice

by John Wubbel

So what's the big deal with maintaining code? Many programmers say that object oriented programming—especially the reuse of C++ classes—is the way to go. But, do we really practice what we preach?

The cost of maintenance and support of software, and particularly the time it takes to debug a problem, can be very expensive. Within the domain of application programming, these principles apply well. But not far outside that domain, developers can hack a solution together with a great deal of disrespect for good development methodologies for striving to write defect free code.

Shell game

A great deal of development work often takes place in command shell environments. Programmers love the capability various shells offer, particularly since many of the skills learned transfer. For example, the transition from SunOS to an AIX system is not all that difficult because the shells port from one platform to another. There is even a BASH (aka Bourne Again Shell) for OS/2 that is very common on Unix.

The power of a command is proportional to its complexity and of course the level of skill the programmer in the particular environment. This skill is extensible by the next step of going from command line work to writing Korn shell scripts, REXX, or other scripting languages or interpreters. Even though the principles of object oriented programming may not apply, that does not mean developers should ignore good programming practices.

While each domain has its limitations with just how careful you must be in practice, the little things count toward making a script or program useful while limiting the risk of defects. It seems as though the more we write, the scripts get larger and become pieces in a larger system. Programming malpractice develops its own synergy as the application gets larger in size. Carelessness or sloppy code may not be as much of a contributing factor as the programmer's own cleverness. We really feel like magician pulling a magic trick when our code pulls a rabbit out of the hat and no one knows how we did it!

Again, it is the little things like coding for good readability and documenting our work (even if it takes more lines of text to describe the code than there are statements to execute). Consequently, the code you write is going to be the code another developer will someday revisit to upgrade or maintainance.

Many programmers have the idea that code reuse consists of finding some public domain source, bringing it in-house and kit bash it to work with a conglomeration of other code. This is not a formalized means of effective

code reuse as it is understood in the object-oriented world. I am not talking about larger libraries or APIs. I am referring to the code snippets or single source files that generally contain a quick and dirty function where the appeal is that it will save time from writing something similar.

There are global variables, automatic variables, static variables, and then there are phantom variables. I wonder sometimes if that is not the real name for an environment variable. Allow me to cite an example of a case where I was chasing a bug around the rose bushes and, it had to do with environment variables that only seem to exist at runtime.

Phantoms

I had an occasion of investigating a small Web based application. The Web server serviced clients with the Common Gateway Interface (CGI). Fill out the form, press the submit button, and an action occurs. The action is performed by a CGI script that can be in the form of a Korn shell script, Perl, or even a compiled C program. Most Web server configurations locate the scripts that are fired in a directory called /cgi-bin. Most everything that happens in response to servicing the client is executed on the back-end or server side. As it turned out, a whole set of environment variables were being set at runtime. In other words, ksh script, there would be a statement like the following:

```
#!/bin/sh
file=$REMOTE_UID"_track.html"
./setwork_env.sh
.....additional statements
./gettime $TMPDIR/time.log
./tracker $DOCUMENT_ROOT/$file
```

Or, we might see something like

```
export ACTIONSEQ=http://{$HTTP_HOST:-
${SERVER_NAME}: ${SERVER_PORT}}/cgi_bin/maketime.ksh
```

To the programmer that inherits this wealth of code, it is a pretty daunting task to figure out without any documentation where the variables are set and what string they represent at runtime. One feels like Sherlock in attempting to run down the information. It is more difficult when the application is broken. To make matters worse, this case had executables with the same name as a ksh file. I thought carelessness was involved in the naming conventions to start with. In any event, some variables were set before the above ksh ran, some were set by setwork_env.sh and in the most interesting case, we had these phantom variables. The failure developed as a consequence of not having the right variable in place before gettime or tracker executed. One C program would dynamically create the environment vari-

able name itself. No matter how we grep'd, we could not find any hard coded string. Two pieces of it were floating around, the `WWW_` and a second part, `src_id`. One line of source code told us that it had to exist:

```
 sprintf(scr_id, "%s",
        getenv("WWW_src_id"));
```

We eventually found the solution. As the original developer implemented it, once the name of the variable was invented, the `QUERY_STRING` was parsed for a specific item entered by the user. This item became part of the phantom environment variable string that existed for a fleeting moment in the server side runtime. The `QUERY_STRING` was a concatenation of fields from the origi-

nal Web form. The broken link in the process was found that proved a dependence existed in order for tracker to run correctly. The phantom variable simply was not getting created. When the `QUERY_STRING` was parsed, the program built the name for the variable by concatenating the `WWW_` to a string that identified the source field, and then used that data to set the variable for export.

The only piece of documentation we found was a comment in reference to `QUERY_STRING` which stated the following:

"Unescape all the fields in a form and stick them in the environment so they can be used without awful machinations."

This seemed like a very clever piece of work. Some might say it was elegant, in the face of the tools available to implement it. In any regard, within this domain, more documentation regarding the design would have been good practice. It would have lead to decreased down time. And, those phantom variables would not have spooked us as bad as they did! ☺

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New and improved

random bits

compiled by Esther Schindler

There's a never ending stream of new OS/2 development tools. So, how can it follow that we OS/2 users have fewer native applications than anybody else? Who's actually using these things?

At any rate, we do have a new crop of applications, mostly Internet related and developer utilities. But you'll see a few more end-user applications creep in here, too.

Web site management tools

Http-analyze is a fast log analyzer for Web servers. It analyzes log files and creates a detailed summary of the server's access load in tabular, graphical, and three-dimensional format.

The OS/2 port is available at www.SteffenSiebert.de/ports/http-analyze.html. The source code is available at www.netstore.de/Supply/http-analyze.

Sitecopy easily maintains remote Web sites. The program uploads files to the server which have changed locally, and deletes files which have been removed locally, keeping sites synchronized with a single command. The OS/2 port 0.4.6 is available at www.SteffenSiebert.de/ports/sitecopy.html. Check the README file for information on new and old features.

A mailing list is available for sitecopy discussion. Subscribe at www.lyra.org/mailman/listinfo/sitecopy or by email to sitecopy-request@lyra.org.

The original Unix source is available from www.lyra.org/sitecopy.

Both of these applications are freeware.

Please send questions to ports@SteffenSiebert.de.

TimeKeeper/2

TimeKeeper/2, written and published by BMT Micro, retrieves Universal Coordinated Time (UTC) from a time server using time protocol RFC868. It compares the results to your system time, and optionally updates your system time if necessary.

TimeKeeper/2 can be configured to adjust for Daylight Saving Time, if you provide your time zone information in the program settings.

TimeKeeper/2 uses a set of predefined NIST (National Institute of Standards and Technology) servers which are synchronized with an atomic clock. When TimeKeeper/2 is installed, a server is automatically selected, though it may be changed at any time.

TimeKeeper/2 is ideal for keeping your system time and date as accurate as possible. It makes a nice addition to your Startup folder.

It costs \$10, available at BMT Micro.

PrjBld

PrjBld 1.0 is a programmers project folder creation tool for OS/2.

PrjBld creates a project folder on your desktop or in a designated folder. It automatically populates the folder with a series of nested folders, directory shadows, and program objects that you designate. It instantly customizes your development tools to work on a new/existing project.

PrjBld configures your tool and utility command line options to work with your project. Each project folder is a separate environment, which does not affect other project/tool settings.

PrjBld has a Presentation Manager interface, remembers tool command line and DOS settings, and works with OS/2, WinOS/2, and DOS tools. It uses drag and drop throughout, and has extensive context sensitive help.

PrjBld is \$15, and is available at BMT Micro. The developer's site is www.idk-inc.com.

Java Update Control System

JUCS allows you to easily update your released products using special "patching" techniques. Your products can automatically keep themselves at the latest version, and you can publish your product's patches via ftp, Web, or JUCS' built-in Patch Server. JUCS also allows you to create single Install.class files to deploy your products with.

Though a Java application, JUCS was written entirely under OS/2, so it has been tested the most under OS/2. OS/2ers should appreciate its "OS/2 feel." It works great under OS/2 Java 1.1.7.

A free, non-crippled, evaluation version is available at <http://members.xoom.com/jucs7>. Contact Edward J. Becker (Sauron@totcon.com).

PhotoTiger

PhotoTiger 2.0 is a OS/2 PM program for editing digital photos and pictures.

Supported file formats include BMP, JPG, IMG, and PNG. Mouse tools include brush, brush stamp, Free-shaped stamp (from lasso), and Floodfill. You can also use Text, Lasso, Zoom, and scale pictures, and convert picture formats. Pictures can be mirrored, or rotated. You can control brightness and contrast, replace colors, add and remove borders... and plenty more.

The new release adds PNG file format support, line draw with stamp or brush, a new color panel, and tiled picture support.

PhotoTiger is \$20, from BMT Micro.

News Harvest II

News Harvest is an OS/2 PM application for automatic downloading and decoding binary articles from a News server.

News Harvest seamlessly filters, downloads, re-assembles, and decodes all types of files from news. It does not try to be an all-singing/all-dancing suite—there are plenty of fine OS/2 image viewers & sound players already.

News Harvest 1.1 boasts many improvements and enhancements. The core downloading engine has been optimised, offering smoother running, and better decoding. Plus, the user interface has undergone major changes.

For full details, check out www.krt.com.au/ns. The software is available at BMT Micro for \$24.

PMView

PMView 1.05 is a viewing and editing tool for bitmapped graphics. It provides support for systems with palette manager and deep color displays. On systems with palette manager, PMView gives you color animation and its color optimizing functions make sure that you always get good looking images with the best colors possible.

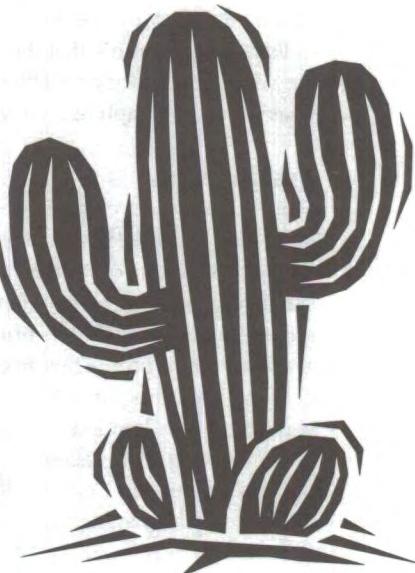
Several bugs were fixed in version 1.05, but the new release also offers new functionality, including improved file open/save

dialogs and transform/save functions. When you install PMView, it is now automatically registered as the default viewer for Warp 4. (It is no longer needed to run SET-DEFV.CMD to do this).

Price: \$42, BMT Micro. ☎

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Moneydance 2.0

by Niels Jensen

Review

Since we got our first home computer last year, I have been searching for ways to keep track of our family financial situation. Since our family is brought together from two countries—Canada and Denmark—we need to track several different accounts in different currencies plus share accounts and several home mortgage accounts. It is possible to do this in a Lotus 1-2-3 or Mesa spreadsheet or in an Approach database, but none fit the bill like a full-featured personal finance application, such as Quicken. At the end of 1998 I discovered Moneydance, a full-featured personal finance application written in Java. Since then, our personal finances have been handled with Moneydance 2.0b5.

Initially, I was a little concerned about using a beta version of an application as my primary means of personal accounting. However, extensive use during the Christmas holiday convinced me that the basic parts of the program are very stable. I was only able to bring the program down while using the graph feature, which I don't really need.

Installation

Moneydance is developed by Sean Reilly in Java on Linux and tested on FreeBSD, and it is available from the author's Web site www.seanreilly.com/java/moneydance. The Web site is very informative, with feature descriptions and screen shots from both the current beta, version 2.0 beta 6, and the current production release, version 0.9.4. The use of Moneydance requires that you have a Java Runtime Environment (JRE) installed on your system. For OS/2 this may be downloaded from the IBM's Software Choice Web site for free, provided you have an OS/2

Moneydance 2.0

Free (\$25.00 for business)

Sean Reilly
11011 Thrush Ridge Rd
Reston, VA 20191
sreilly@seanreilly.com
www.seanreilly.com/java/moneydance

Warp 3.0 or 4.0 license. For version 2.0 of Moneydance you will also need

Sun/Javasoft "Swing" version 1.1. If you have the Java Swing classes, then Moneydance is just a 328 KB download. With the Swing classes it grows to 1.78 MB.

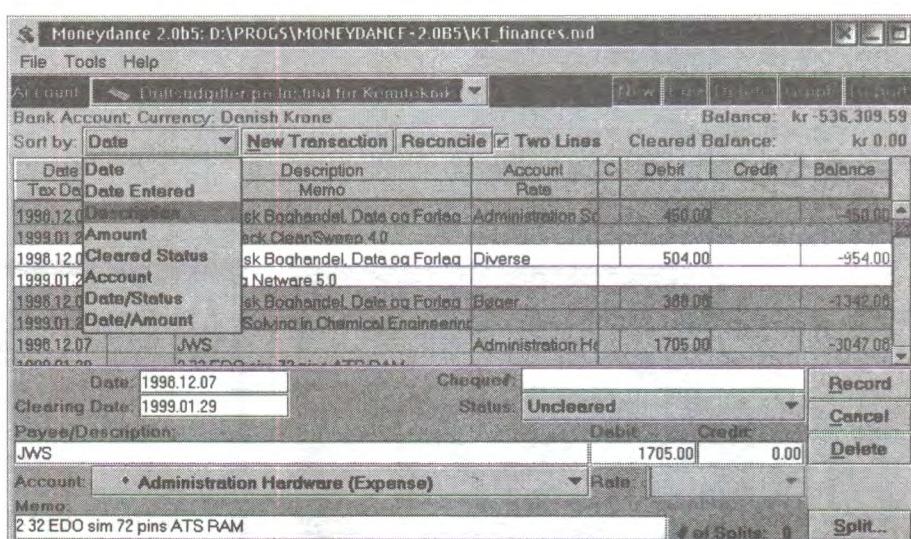
This review is based on my experience with version 2.0 beta 5, but I don't believe the current version (beta 6) is a lot different. The only exceptions are an added "export to HTML" facility, which makes integration with dynamic Web pages possible, plus an easier exchange rate entry facility. I currently don't need the export facility, and I only enter new exchange rates at year end.

Once you have downloaded the file—in my case moneydance2_0b5_withswing.zip—you place it in the directory in which you want Moneydance installed.

Move to this directory and edit the file `moneydance.cmd`. You need to set environment variables for the JRE and Moneydance's location. In my case, the result was:

```
set JAVA_HOME=c:\java11
set classpath=%JAVA_HOME%\lib\classes.zip
set moneydance_HOME=d:\progs\moneydance-2.0b5
set HOME=d:\HOME\
Detach %JAVA_HOME%\bin\java -noj -classpath
%CLASSPATH%;%MONEYDANCE_HOME%\moneydance.jar Moneydance
```

(The detach command is a single line in the command file.) Once you have edited and saved this file, create a copy of the "Run Java PM Program" icon from the Java for OS/2 folder on your desktop. Change the path and file name to point at the command file you just edited, and set the working directory as where the command file is located. If you want Moneydance to start with a particular file each time, then you may specify a ".md" file in the



This view, which you work in when entering data into Moneydance, also has sorting options, which makes finding a given transaction very easy.

parameter field. Moneydance also saves this information together with other configuration data in a directory, which you specify in the command file. Also, change the program name on the icon tab to Moneydance.

As you can see, installation of Java programs is not yet a simple point and click.

Getting started

Start Moneydance by clicking on the Moneydance icon. The first time, you are presented with an empty area with just the title bar and a menu bar with three choices: File, Tools, and Help. File lets you create a new set of accounts, load an existing one, or set user preferences. Among the preferences are date format, decimal point, and language, as well as interface look and feel. Tools lets you import data in the QIF-format (used by many other personal finance applications), or modify currency and exchange rates. Tools also includes a currency calculator and a reminder function. Help, of course, gives you access to online help.

Once you choose "File, New" to create a new account portfolio, the flexibility of the application becomes visible. You need to

choose your primary currency, and if the currency you need is not available you simply create it. Of course, you may also edit existing currencies. The program is ready for the euro.

You also need to choose between a standard or minimal account set. I agree with the author's recommendation to choose the standard account set, since you can always delete accounts that are not being used. This creates a savings account and a checking account, but you are free to change the account names and to add new accounts.

The program has three types of accounts: bank, expense, and income. Essentially, Moneydance performs true double entry bookkeeping. If you debit your checking account, using either a check or a cash card, that debit is credited to one or more expense accounts, or another bank account. In the extreme you could use Moneydance to keep track of how much change you have in your pocket.

I have used Moneydance 2.0b5 at home since Christmas. Our family finances involve a number of bank accounts in Danish Kroner, Canadian Dollars, several mortgage

accounts, and a number of share accounts with Canadian companies. I have modified the standard account set quite a bit. For example, I added an expense category called "Transportation" with sub-accounts (children) such as "Monthly Bus Pass," "Taxi," and "Other transportation."

The reconcile facility makes reconciling with the bank statement blazingly fast. You press Reconcile, enter the balance from the bank statement, and check off the transactions as they appear on the bank statement. You may even enter new

transactions (e.g. for service charges) during reconciliation. A very well designed facility.

At work, I created an account set specifically for budget items I am responsible for. Since we get our official accounting reports about three weeks into the following month, this small tool gives me a nice advantage. In the future, we may use Moneydance to keep track of our petty cash. The illustrations accompanying this article are from my use of Moneydance at work.

Reporting features

Moneydance also comes with very flexible reporting features. You specify the period of interest, the account(s), and what type of summation you want. Once the report is updated, you may modify the size of different fields and print or save the report.

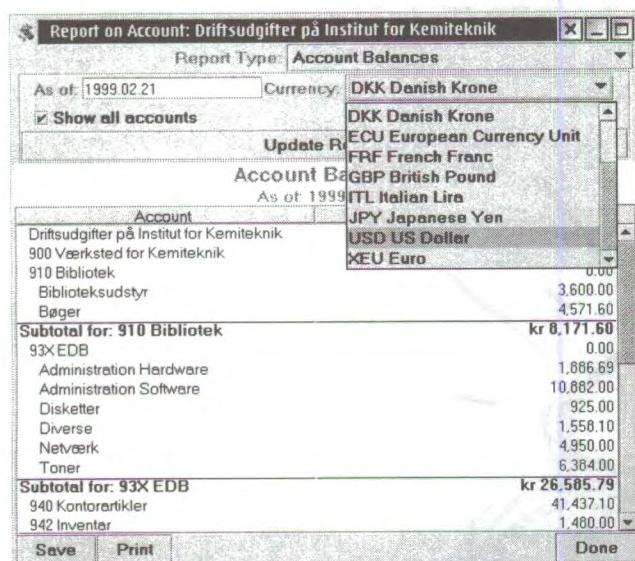
A graph feature allows you to create pie charts with accompanying line or bar charts summed daily, weekly, monthly, or yearly. I don't see a need for a 3D pie chart, and currently the only way to print a graph is using either print screen or PMView's capture facility.

Small things I miss...

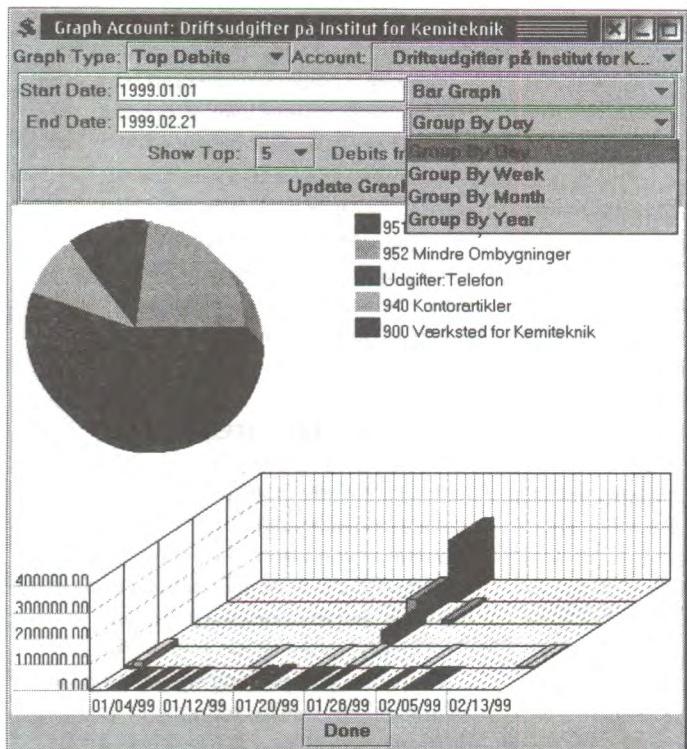
I miss not having the option of specifying an opening balance when creating a new bank account. However, this was resolved by creating an income account with the name "opening balance."

I miss the ability to save a graph, and I find it wrong that the graph uses the American date format MM/DD/YY instead of the user's preference. It would be good to be able to select any five or ten accounts for plotting instead of the current ability to choose a number of the accounts with the largest credits or debits.

Finally, I had a problem using the graph features with the JDK 1.1.6. After corresponding with the author, I learned that this indeed is a problem with the JDK and that it can be worked around if I add 'nojit' as a command line parameter for starting Moneydance.



The reporting tool allows several point and click options, e.g. transactions or balances. Getting a report in a different currency is as easy as choosing the currency and a click on the update report button.



The graphing possibilities are presently rather limited. You get a pie-chart with either a line-graph and a bar-graph below. Note that the dates on the bar-graph are in American notation, even though the user preference is set to ISO-date.

I also would like the possibility of selecting among several exchange rate tables. In particular, I would like to store year-end exchange rates for later use in reports. I

created a mailing list for Moneydance, to keep in contact with current users.

would like to see more user configuration of reports (e.g. the ability to add and remove fields from the reports). In some applications I have no need for the check number field, but would like to see the information in the memo field.

Future plans

According to the feature page of the Moneydance Web site, several interesting items are in the works: online banking, stock portfolio and investment management, online portfolio updates, and check printing. The author also has

Licensing

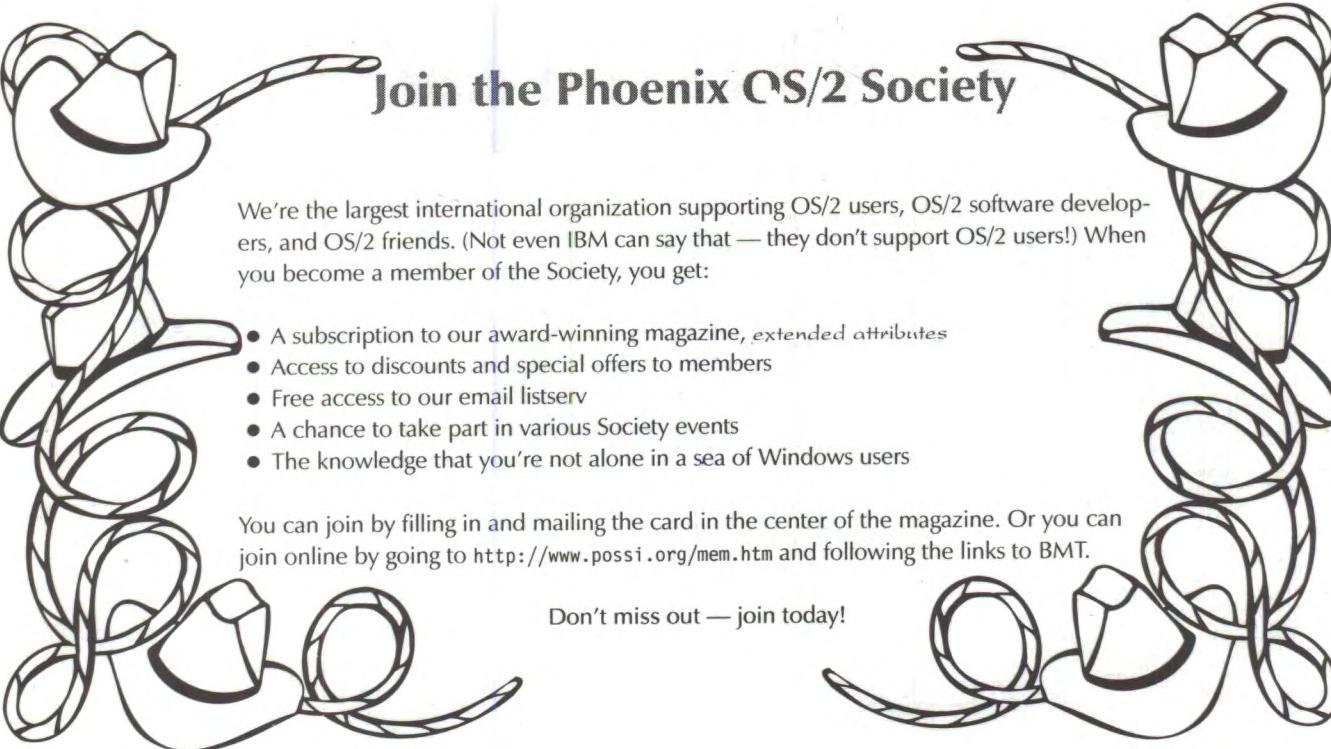
Moneydance is free to download for personal use. The zip file includes the file license.txt, which makes it clear that if you are using Moneydance for doing your work, whatever your "work" may happen to be, you must register your copy of Moneydance. The standard registration fee is currently \$25 per license, which could be either user or workstation based—which ever is the smaller number. Site licenses are also available. Currently the only method of payment is snail-mail.

Conclusions

Moneydance 2.0b5 (and b6) is a flexible and versatile personal finance manager that I can highly recommend to anybody looking for this type of program. It handles multiple currencies and shares with ease, and in addition it is platform independent, since it is a 100% Java program. ☺

Niels Jensen is an assistant professor of Chemical Engineering at the Technical University of Denmark in Lyngby, Denmark. His research and teaching interests are in chemical process safety. He has been using OS/2 since version 2.1 in the fall of 1993. A process control group in his department has been using OS/2 since version 1.1 for data acquisition tasks.





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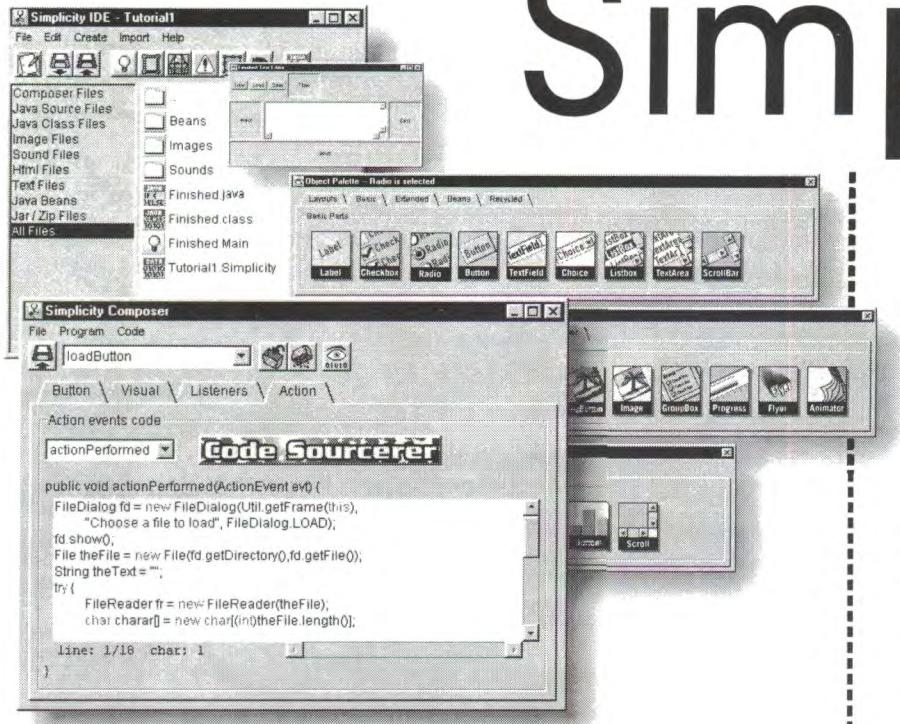
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